

WHAT IS CLAIMED IS:

1. A motor apparatus including:  
a motor having a drive shaft;  
first damper means mounted on the drive shaft of  
said motor, said first damper means reducing vibration  
caused during acceleration for raising up to a target  
speed from the start of the driving of said motor; and  
second damper means mounted on the drive shaft of  
said motor, said second damper means reducing vibration  
caused during the constant speed driving of said motor.
2. A motor apparatus according to Claim 1,  
wherein said first damper means is a rubber damper, and  
said second damper means is a magnet damper.
3. A motor apparatus according to Claim 2,  
wherein said rubber damper comprises rubber mounted on  
the drive shaft of said motor, and an inertia member  
mounted on said rubber, and said magnet damper  
comprises a magnet mounted on an iron hub mounted on  
the drive shaft of said motor, through a rulon.
4. A motor apparatus according to Claim 2,  
wherein said first damper means is a damper effective  
at a frequency vibrated and attenuated with the  
characteristic of a load by impulse response at the  
start of acceleration.

5. A motor apparatus according to Claim 3,  
wherein said magnet damper is mounted so that during  
acceleration, inertia applied to the motor shaft may be  
small and during a constant speed, sufficient inertia  
5 may be applied to the motor shaft.

6. A motor apparatus according to Claim 1,  
wherein as compared with said first damper means, said  
second damper means is great in inertia.  
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7. A motor apparatus according to Claim 1,  
wherein said motor is used as a motor for driving the  
moving mechanism of an image reading apparatus.  
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8. A motor apparatus for driving the movable  
member of an image reading apparatus, including:  
a moving mechanism for driving a movable member  
for image reading;

20 a motor for driving said moving mechanism, said  
motor having a drive shaft;

a rubber damper as first damper means mounted on  
the drive shaft of said motor, said rubber damper  
reducing vibration caused during acceleration for  
raising up to a target speed from the start of the  
25 driving of said motor; and

a magnet damper as second damper means mounted on  
the drive shaft of said motor, said magnet damper

reducing vibration caused during the constant speed  
driving of said motor.

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